

ABSTRACT

Pollutants, such as heavy metals, phosphorus, and pathogenic organisms, are removed from water by adding a chemical coagulant to the water within an enclosure. The water and the coagulant are mixed, and coagulation and flocculation are permitted to occur. The mixing is stopped, and a floc is permitted to settle to the enclosure bottom. The floc contains the pollutant; so the treated water above the floc is free from at least some of the pollutant. At least some of the treated water is removed from the enclosure, and new water is added to the enclosure. The new water and the settled floc are mixed to resuspend components of the floc. The process is repeated for multiple iterations, until the floc no longer exhibits contaminant-removal capability, at which time the floc is removed from the enclosure.